AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

 (Currently amended) A foam comprising a liquid phase and a gas phase wherein

the liquid phase comprises at least one sclerosing agent and is at least 20%-vol/vol of at least one viscosity enhancing agent, the liquid phase having a viscosity between 2cP and 5cP; and

the gas phase comprises at least $\frac{50\%}{90\%}$ CO2; and wherein the foam has a density less than 0.25 g/ml and half life of greater than $\frac{100}{90}$ secs.

- 2-3. (Canceled)
- 4. (Previously presented) A foam of claim 1, wherein the gas phase comprises at least 99% CO2.
- 5. (Previously presented) A foam of claim 1, wherein the gas phase consists essentially of CO2.
- 6-7. (Canceled)

- 8. (Currently amended) A foam of claim 1, wherein the half life is at least 180 100 seconds.
- 9. (Currently amended) A foam of claim 1, wherein the density ranges from 0.07 to 0.22 0.07-0.19 g/ml.

10-11. (Canceled)

12. (Currently amended) A foam of claim 1, wherein the density ranges from 0.08 to 0.14 0.07-0.16 g/ml.

13-15. (Canceled)

- 16. (Previously presented) A foam of claim 1, wherein the at least one viscosity enhancing agent is chosen from glycerol and PVP.
- 17. (Canceled)
- 18. (Currently amended) A foam of claim 1, wherein the at least one sclerosing agent is chosen from polidocanol, glycerol and sodium tetradecyl sulphate.
- 19. (Previously presented) A foam of claim 1, wherein the at least one sclerosing agent is polidocanol.

20. (Currently amended) A foam of claim 4 19, wherein the polidocanol is present in a concentration ranging from 0.5 to 4% vol/vol in the liquid phase.

21-24. (Canceled)

- 25. (Previously presented) A foam of claim 1, wherein at least 50% by number of the gas bubbles of at least $25\mu m$ diameter are of no more than $120\mu m$ diameter and at least 95% of these gas bubbles are of no more than $250\mu m$ diameter.
- 26. (Canceled)
- 27. (Previously presented) A method for phlebologic treatment comprising injecting a foam of claim 1 into vessels to be treated.
- 28. (Previously presented) The method of claim 27 wherein substantially the entire greater saphenous vein of one leg of a human patient is treated by a single injection of foam.
- 29. (Previously presented) The method of claim 27 wherein the single injection uses an amount ranging from 10ml to 50ml of foam.
- 30. (Canceled)

31. (Previously presented) The method of claim 27 wherein the single injection uses an amount ranging from 15ml to 30ml of foam.

32-63. (Canceled)

64. (Currently amended) A method for producing a foam comprising passing a mixture comprising at least one physiologically acceptable blood dispersible gas, the gas being at least 90% carbon dioxide, and at least one aqueous sclerosant liquid, the liquid comprising at least one sclerosing agent and at least one viscosity enhancing agent and having a viscosity between 2cP and 5cP, through one or more passages having at least one cross-sectional dimension of from 0.1 to 15 μm, and the mixture comprises not more than 0.8% nitrogen gas by volume,

the ratio of gas to liquid being controlled such that the foam is produced having a density less than 0.25 g/cm and a half-life of greater than 100 90 secs.

65-86. (Canceled)

- 87. (New) The foam of claim 1, wherein the foam has a half life of greater than 120 secs.
- 88. (New) The method of claim 27 wherein the single injection uses an amount ranging from 10ml to 40ml of foam.